

Appl. No. 09/844,568
312 Amendment dated May 27, 2004
Reply to Notice of Allowance

Amendments To Claims

This listing of claims will replace all prior versions and listings of claims in the subject patent application.

Listing of Claims

Claim 1 (currently amended). An interconnect for an electrically driven solid electrolyte oxygen separation device comprising a composition of matter represented by the general formula:

Ln_xCa_{x'}A_{x"}Mn_yB_{y'}O₃₋₈

wherein

Ln is La;

A is Sr;

B is Co:

0.3 < x < 0.5; 0.5 < x' < 0.7; 0 < x'' < 0.2;

0.9 < y < 1.05; and 0 < y' < 0.1;

 $0.3 \le x \le 0.5$; $0.5 \le x' \le 0.7$; $0 \le x'' \le 0.2$;

0.9 < y < 1.05; and 0 < y' < 0.1;

provided that x + x' + x'' = 1 and $1.05 > y + y' \ge 1.02$

wherein δ is a number which renders the composition of matter charge neutral.

Claim 2 (previously presented): The electrochemical solid-state device of claim 13 wherein the at least one interconnect consisting of a single layer comprises a composition of matter wherein Ln is La.

Claim 3 (previously presented): The electrochemical solid-state device of claim 13 wherein the at least one interconnect consisting of a single layer comprises a composition of matter wherein A is Sr.